

**IT IS THE VENDOR'S RESPONSIBILITY TO CHECK
FOR ADDENDUMS PRIOR TO SUBMITTING PROPOSALS**

**REQUEST FOR PROPOSALS
SPECIFICATION NO. 06-008**

The City of Lincoln, Nebraska intends to contract for and invites you to submit a sealed proposal for professional Architectural/Landscape services related to the project listed and described below:

**BACKBONE SWITCH UPGRADE
for City of Lincoln/Lancaster County**

Sealed proposals will be received by the City of Lincoln, Nebraska on or before **12:00 noon, Wednesday, January 4, 2006** in the office of the Purchasing Agent, located at Suite 200, K Street Complex, 440 South 8th Street, Lincoln, Nebraska, 68508. **Proposals will be publicly opened, reading only the names of those submitting proposals, at the K Street Complex.**

A copy of the request for proposal may be obtained from the Purchasing Division web site at:
www.ci.lincoln.ne.us keyword search Bid.

Submitter should take caution if U.S. mail or mail delivery services are used for the submission of proposals. Mailing should be made in sufficient time for proposals to arrive in the Purchasing Division prior to the time and date specified above.

REQUEST FOR PROPOSALS
SPECIFICATION NO. 06-008
City of Lincoln/Lancaster County
Backbone Switch Upgrade

1 **INTENT**

- 1.1 The City of Lincoln plans to upgrade it's existing core backbone switch equipment.
- 1.2 The City of Lincoln network currently supports 4000 nodes in a layer 3 VLAN environment and supports the following protocols: TCP/IP, IPX, DEC, LAT, NetBIOS, and AppleTalk.
- 1.3 The backbone primarily consists of six locations each connected via single mode fiber optics.
- 1.4 Each of these locations acts as a Gigabit concentration point for other outlying buildings.
- 1.5 The City/County employees run a multitude of different applications and 75% of those are hosted on servers located in the Information Services building.
- 1.6 The City/County also plans to implement VoIP in the near future and wants to make sure that the core backbone switch equipment is sufficient to support VoIP. Quality of service (QOS) and redundancy will be key in the design.
- 1.7 Outlined below will be a detailed requirement at each location.

2 **LOCATION #1 THE HALL OF JUSTICE, 533 SOUTH 10TH ST**

- 2.1 The Hall of Justice (HOJ) is the main fiber concentration point for the City of Lincoln and currently handles almost 80% of all network traffic.
- 2.2 This location will need a chassis based Ethernet routing switch that scales up to 240 non-blocking Gigabit Ethernet ports and 24 non-blocking 10 Gigabit ports while running dual switch fabric/CPU modules.
- 2.3 The switch will also require redundant, hot swap power supplies.
- 2.4 The installed configuration for this switch will need 60 ports of SFP GBIC Gigabit with 30 SX GBIC modules and 20 LX GBIC modules supplied.
- 2.5 The 60 ports of Gigabit shall be on a minimum of two separate modules.
- 2.6 The switch will be connected back to Location #2 (Information Services) via redundant Gigabit connections.
- 2.7 The redundant connections must support some type of multi link trunking with automatic fail over capabilities.
- 2.8 Vendor must explain this capability in detail and the time it takes to fail over.

Installed Configuration

1 - Chassis
3 - Power Supplies
2- Switch Fabric/CPU Modules
60 - SFP GBIC Gigabit Ports (minimum 2 modules)
30 - SX SFP GBIC Modules
20 - LX SFP GBIC Modules
1 - Multiprotocol Routing Switch Software

3 **LOCATION #2, INFORMATION SERVICES, 233 SOUTH 10TH ST**

- 3.1 Information Services (IS) is the main server concentration point for the City of Lincoln.
- 3.2 This location will need a chassis based Ethernet routing switch that scales up to 240 non-blocking Gigabit Ethernet ports and 24 non-blocking 10 Gigabit ports while running dual switch fabric/CPU modules.

- 3.3 The switch will also require redundant, hot swap power supplies.
- 3.4 The installed configuration for this switch will need 60 ports of SFP GBIC Gigabit with 10 SX GBIC modules and 10 LX GBIC modules supplied.
- 3.5 The 60 ports of Gigabit shall be on a minimum of two separate modules for redundancy.
- 3.6 The switch will be connected back to Location #1 (HOJ) via redundant Gigabit connections.
- 3.7 The redundant connections must support some type of multi link trunking with automatic fail over capabilities.
- 3.8 Vendor must explain this capability in detail and the time it takes to fail over.

Installed Configuration

- 1 - Chassis
- 3 - Power Supplies
- 2- Switch Fabric/CPU Modules
- 60 - SFP GBIC Gigabit Ports (minimum 2 modules)
- 10 - SX SFP GBIC Modules
- 10 - LX SFP GBIC Modules
- 1 - Multiprotocol Routing Switch Software

4 LOCATION #3, K STREET COMPLEX, 440 SOUTH 8TH ST

- 4.1 The K Street Complex acts as a Gigabit concentration center for other out lying buildings.
- 4.1 This location will need a layer 3 Ethernet routing switch with 24 non-blocking GBIC Gigabit ports available.
- 4.2 Redundant power supplies are required in the switch.
- 4.3 The installed configuration for this switch will require 6 SX GBIC modules and 2 LX GBIC modules.
- 4.4 This switch will be connected via redundant Gigabit connections back to location #1 (HOJ) and location #2 (IS).
- 4.5 The redundant connections must support some type of multi link trunking with automatic fail over capabilities.
- 4.6 Vendor must explain this capability in detail and the time it takes to fail over.

Installed Configuration

- 1 - 24 port GBIC Gigabit Switch
- 6 - SX GBIC modules
- 2 - LX GBIC modules
- 2 - Power Supplies
- 1- Multiprotocol Routing Switch Software if needed

5 LOCATION #4, COUNTY ENGINEER, 444 CHERRY CREEK RD.

- 5.1 The County Engineer acts as a Gigabit concentration center for other out lying buildings.
- 5.2 This location will need a layer 3 Ethernet routing switch with 24 non-blocking GBIC Gigabit ports available.
- 5.3 Redundant power supplies are required in the switch.
- 5.4 The installed configuration for this switch will require 2 SX GBIC modules and 6 LX GBIC modules.
- 5.5 This switch will be connected to location #1 (HOJ).
- 5.6 It will not be connected in a redundant fashion, but should have the same capabilities for redundancy as the switch in location #3 (K Street).

Installed Configuration

- 1 - 24 port GBIC Gigabit Switch
- 2 - SX GBIC modules
- 6 - LX GBIC modules
- 2 - Power Supplies
- 1- Multiprotocol Routing Switch Software if needed

6 LOCATION #5, HEALTH DEPARTMENT, 3140 N STREET

- 6.1 The Health Dept. acts as a Gigabit concentration center for other out lying buildings.
- 6.2 This location will need a layer 3 Ethernet routing switch with 24 non-blocking GBIC Gigabit ports available.
- 6.3 Redundant power supplies are required in the switch.
- 6.4 The installed configuration for this switch will require 8 SX GBIC modules and 2 LX GBIC modules.
- 6.5 This switch will be connected to location #1 (HOJ).
- 6.6 It will not be connected in a redundant fashion, but should have the same capabilities for redundancy as the switch in location #3 (K Street).

Installed Configuration

- 1 - 24 port GBIC Gigabit Switch
- 8 - SX GBIC modules
- 2 - LX GBIC modules
- 2 - Power Supplies
- 1- Multiprotocol Routing Switch Software if needed

7 LOCATION #6, CITY/COUNTY BUILDING, 575 SOUTH 10TH STREET

- 7.1 The City/County building has the largest concentration of users with approximately 750 users/devices.
- 7.2 The building consists mainly of two floors; each with it's own data closet.
- 7.3 Each floor will require 8 - 48 port 10/100/1000Mb switches in a stacked configuration.
- 7.4 These switches must also support power over ethernet (PoE).
- 7.5 Each stack will be connected via fiber optics to location #1 (HOJ) and location #2 (IS) in a redundant configuration.
- 7.6 The connection to the HOJ will be via multimode fiber and the connection to IS will be via single mode fiber.
- 7.7 The redundant connections must support some type of multi link trunking with automatic fail over capabilities.
- 7.8 Vendor must explain this capability in detail and the time it takes to fail over.

Installed Configuration

- 16 - 48 port 10/100/1000Mb PoE Stackable Switches with the necessary GBIC's and stacking hardware to achieve the above mentioned configuration.

8 MAINTENANCE/SUPPORT

- 8.1 Maintenance for the chassis based switches at HOJ and IS shall be on a 8x5 Next Business Day replacement with 7/24 phone support and software updates.
- 8.2 All other items will require software updates only and will be spared on site.
- 8.3 Vendor must explain in detail how your organization will provide maintenance and support.
- 8.4 Will it be handled through the manufacturer directly or will the local partner be involved.

- 8.4.1 If the local partner is involved, what level of technical expertise will be available and what will the response time be if needed.

9 SPARE EQUIPMENT

- 9.1 1 - 48 port 10/100/1000Mb PoE switch of the type that will be installed in the City County Building.
- 9.2 1 - 24 port Gigabit switch of the type that will be installed at the out lying locations.
- 9.3 1 - Gigabit module of the type that will be installed in the chassis switch at IS and HOJ.
- 9.4 The above listed items are to be included the Proposal for spares:

10 TRAINING/INSTALLATION

- 10.1 It is the intention of the City of Lincoln to install this equipment with minimal assistance from the local partner.
- 10.2 There will be a necessary time frame to be brought “up to speed” on the new core equipment.
- 10.3 There are three network technicians that will need this introduction to the new equipment.
- 10.4 Vendor must explain in detail your options for the training and or installation assistance.

11 REFERENCES

- 11.1 Vendor must list three other local/regional installations that your organization has been involved in.
- 11.2 Indicate the size and scope of the installations.
- 11.3 List name, phone number and e-mail address of a contact person.

12 GENERAL STATEMENT OF QUALIFICATIONS

- 12.1 The information that should be submitted regarding the firm’s general statement of qualifications consists of the following:
- 12.1 Firm name, address, and telephone number
- 12.2 Number of years established and former names of firm
- 12.3 Types of services particularly qualified to perform
- 12.4 Names of Contact person/s for this project
- 12.5 Names of key personnel, experience of each, and length of service of the firm
- 12.6 Number of staff usually and currently employed
- 12.7 Outside consultants and associates that would be part of the team
- 12.8 List of completed projects of similar nature for which the firm was the principal professional
- 12.9 Willingness and capability to complete project in a timely manner.
- 12.10 Other additional material as may be required in the scope of services
- 12.11 References

13 SERVICES PROVIDED BY THE CITY

- 13.1 The firm shall identify in its proposal what services and assistance it expects to be provided by the City of Lincoln.

14 THE SELECTION PROCESS

- 14.1 The City’s selection process will include the following basic steps:
- 14.1.1 Form selection committee
- 14.1.2 Review proposals
- 14.1.3 Interview consultants if necessary
- 14.1.4 Selection recommendation by committee

15 **PROGRESS MEETINGS**

- 15.1 At progress meetings, the consulting firm selected shall furnish to the City copies of a written progress report.
- 15.2 The progress report shall cover contract activities including a narrative section on progress of the work by task; a percentage of the work completed by task; a charter table showing the funds expended; cumulative expenditures by task; and estimated costs to complete the work.

16 **GENERAL TERMS AND CONDITIONS**

- 16.1 All firms submitting a proposal will be informed in writing of the City's decision within 20 working days following the final consultant selection.
- 16.2 The Mayor of City of Lincoln shall be the final decision making authority for the City.
- 16.3 The project may be constructed in one or more phases depending upon availability of funding and other factors.

17 **FURTHER INFORMATION**

- 17.1 Questions relating to information contained in this Request for Proposals shall be submitted to Vince M. Mejer, Purchasing Agent 440 S. 8th Street, Suite 200, Lincoln, NE 68502, Phone 402-441-8314 or email vmejer@ci.lincoln.gov

18 **SYSTEM DESIGN AND TECHNICAL**

- 18.1 The Vendor will prepare draft technical specifications for approval by Information Services.
- 18.2 The technical specifications will identify the system capabilities in response to the identified, and will result in a complete and cohesive system capable of addressing the system needs.
- 18.3 The specifications will address the purchase of all necessary components to include but not limited to hardware and software to respond to the User Needs.
- 18.4 **Deliverables:**
 - 18.4.1 The technical specifications will be submitted as follows:
 - 18.4.1.1 An initial draft of technical specifications.
 - 18.4.1.2 Disposition of written comments from Information Services, consolidated and provided by the project manager.
 - 18.4.1.3 The consultant will prepare a final set of technical specifications.
 - 18.4.1.4 Installation of systems
 - 18.4.1.5 Testing of systems

19 **EVALUATION AND SYSTEM TESTING**

- 19.1 As part of the vendor's contract, they will be required to submit acceptance testing parameters, which are directly applicable to their installation.
- 19.2 The consultant will review the proposed tests to see that they fully test the components, subsystems and full system integration.
- 19.3 If needed, the consultant will conduct the acceptance tests with the project manager and document the results.
- 19.4 **Deliverable** shall include; A white paper review of the vendor's acceptance testing procedure, including recommendations for changes.

20 **AWARD**

- 20.1 Depending on the proposals received the City may do all locations at one time.
- 20.2 The City reserves the right to award item by item or all items.

PROPOSAL
SPECIFICATION NO. 06-008
OPENING TIME: 12:00 NOON
DATE: Wednesday, January 4, 2006

The undersigned, having full knowledge of the requirements of the City of Lincoln for the below listed phases and the contract documents (which include Notice, Instructions, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to enter into a contract with the City the below listed fees for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for fees listed below.

ADDENDA RECEIPT: The receipt of addenda to the specification numbers _____ through _____ are hereby acknowledged. Failure of any submitter to receive any addendum or interpretation of the specifications shall not relieve the submitter from any obligations specified in the request. All addenda shall become part of the final contract document.

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>UNIT COST</u>
1.	Installation at Hall of Justice, 533 South 10 th St.	\$_____
2.	Installation at Information Services, 233 South 10 th St.	\$_____
3.	Installation at K Street Complex, 440 South 8 th St.	\$_____
4.	Installation at County Engineer, 444 Cherry Creek Rd.	\$_____
5.	Installation at Health Department, 3140 N St.	\$_____
6.	Installation at City/County Building, 575 South 10 th St.	\$_____
7.	Training/Installation	\$_____
8.	TOTAL	\$_____

NO BID SECURITY NEEDED

AFFIRMATIVE ACTION PROGRAM: Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance with the City's policy upon a complete and substantial review of successful firm's equal opportunity policies, procedures and practices.

The undersigned signatory for the submitter represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

RETURN 2 COMPLETE COPIES OF PROPOSAL AND SUPPORTING MATERIAL.
MARK OUTSIDE OF BID ENVELOPE: SEALED PROPOSAL FOR SPEC. 06-008

COMPANY NAME

BY (SIGNATURE)

STREET ADDRESS or P.O. BOX

(PRINT NAME)

CITY, STATE ZIP CODE

(TITLE)

TELEPHONE NO. FAX NO.

(DATE)

ESTIMATED DELIVERY DAYS

TERMS OF PAYMENT

E-MAIL ADDRESS

SUPPLEMENTAL QUESTIONNAIRE

Answer the following for each applicable piece of equipment.

1. List the number and type of fiber ports. _____
2. List the number and type of copper ports. _____
3. What is the full duplex speed of the backplane switch fabric in Gbps? _____
4. What is the maximum Packets Per Second of the switch/backplane? _____
5. In the chassis switch, are both CPU/Supervisor modules active at the same time? _____
If not, what is the mechanism for switching to the backup CPU/Supervisor module and the time required to do so. _____

6. Is the base software package all that is required to support all protocols? _____
If not, explain the licensing requirements for added features and all available protocols.

7. How many redundant power supplies are available? _____
8. What is the minimum number of power supplies required to run the chassis? _____
Provide a break down of how many power supplies are required based on how many modules/boards are installed in the chassis.

9. Are the power supplies powered by 110v or 220v or either? _____
10. Please list the maximum wattage requirements for each power supply. _____
11. List MTBF for each component in the chassis as needed for this design. _____
12. List the protocols or features that will provide redundant links to other equipment and discuss the best and worst case downtime for each should a primary link fail.

13. What protocol or feature will you propose for redundant links for this design?

14. List QOS standards supported.

15. List routing protocols supported.

16. List maximum routing table size. _____

17. List maximum switch table size. _____

18. For installed modules/boards, list the maximum bandwidth between modules and backplane.
Also list maximum stacking bandwidth for stackable switches.

19. ACL's supported? If so, what are the limitations on number and size.

20. Discuss any key features that would set you a part to enable VoIP in a multi vendor environment.

21. List phone vendors running on data network equipment proposed.

22. Explain the different types of network management available for the network equipment proposed and if it is a provided feature or licensed feature

23. Explain the extent of your on-site support infrastructure.

Company Name_____

24. Is support provided through local partners or through the manufacturer? If both, describe the different options.

25. Is a support contract required for software updates? _____

26. List the warranty period for the equipment proposed. _____

**INSTRUCTIONS TO PROPOSERS
CITY OF LINCOLN, NEBRASKA
PURCHASING DIVISION**

1. PROPOSAL PROCEDURE

- 1.1 Each RFP must be legibly printed in ink or typed, include full name, business address, telephone number, fax number and email address of the Proposer; and be signed in ink by the Proposer.
- 1.2 Response by a firm/organization other than a corporation must include the name and address of each member.
- 1.3 A response by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.4 Any person signing a response for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.5 Proposals received after the time and date established for receiving offers will be rejected.

2. EQUAL OPPORTUNITY

- 2.1 Each proposer agrees that it shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, disability, national origin, age, or marital status. In the employment of persons, proposer shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to race, color, religion, sex, disability, national origin, age, or marital status.

3. DATA PRIVACY

- 3.1 Proposer agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 3.2 The proposer agrees to hold the City harmless from any claims resulting from the proposer's unlawful disclosure or use of private or confidential information.

4. PROPOSER'S REPRESENTATION

- 4.1 Each proposer by signing and submitting an offer, represents that he/she has read and understands the specification documents, and the offer has been made in accordance therewith.
- 4.2 Each offer for services further represents that the proposer is familiar with the local conditions under which the work and has correlated the observations with the requirements of the RFP.

5. SPECIFICATION CLARIFICATION

- 5.1 Proposers shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of specification documents.
- 5.2 Proposers desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to date and time for response receipt.
- 5.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 5.4 Oral interpretations/changes to Specification Documents made in any other manner, will not be binding on the City; proposers shall not rely upon oral interpretations.

6. ADDENDA

- 6.1 Addenda are written documents issued by the City prior to the date for receipt of offers which modify or interpret the specification document by addition, deletion, clarification or correction.
- 6.2 Addenda will be mailed or delivered to all who are known by the City to have received a complete set of specification documents.
- 6.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 6.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of offers, except an addendum withdrawing the RFP, or addendum including postponement.
- 6.5 Proposers shall ascertain prior to submitting their offer that they have received all addenda issued, and they shall acknowledge receipt of addenda in their proposal.

7. ANTI-LOBBYING PROVISION

- 7.1 During the period between the proposal advertisement date and the contract award, proposers, including their agents and representatives, shall not lobby or promote their proposal with any member of the City Council or City Staff.

8. EVALUATION AND AWARD

- 8.1 The signed proposal shall be considered an offer on the part of the proposer. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.

- 8.2 No offer shall be withdrawn for a period of ninety (90) calendar days after the time and date established for receiving offers, and each proposer agrees in submitting an offer.
- 8.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 8.4 The RFP process is designed to be a competitive negotiation platform, where price is not required to be the sole determinative factor; also the City has the flexibility to negotiate with a select firm or selected firms to arrive at a mutually agreeable relationship.
- 8.5 A committee will be assigned the task of reviewing the proposals received.
 - 8.5.1 The committee may request documentation from Proposer(s) of any information provided in their proposal response, or require the Proposer to clarify or expand qualification statements.
 - 8.5.2 The committee may also require a site visit and/or verbal interview with a Proposer or select group of Proposers to clarify and expand upon the proposal response.
- 8.6 The offer will be awarded to the lowest responsive, responsible proposer whose proposal will be most advantageous to the City, and as the City deem will best serve their requirements.
- 8.7 The City reserves the right to accept or reject any or all offers, parts of offers; request new proposals, waive irregularities and technicalities in offers; or to award the RFP on a split-order basis, or lump-sum basis; such as shall best serve the requirements and interests of the City.

9. INDEMNIFICATION

- 9.1 The proposer shall indemnify and save harmless the City of Lincoln, Nebraska from and against all losses, claims, damages, and expenses, including, attorney's fees arising out of or resulting from the performance of the contract that results in bodily injury, sickness, disease, death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom and is caused in whole or in part by the proposer, any subcontractor, any directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This section will not require the proposer to indemnify or hold harmless the City of Lincoln for any losses, claims damages, and expenses arising out of or resulting from the sole negligence of the City of Lincoln, Nebraska.
- 9.2 In any and all claims against the City or any of its members, officers or employees by an employee of the proposer, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable,

the indemnification obligation under paragraph 13.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

10. LAWS

- 10.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.
- 10.2 Proposer agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.

11. AWARD

- 11.1 The RFP process is designed to be a competitive negotiation platform, where price is not required to be the sole determinative factor; also the City has the flexibility to negotiate with a selected firm or firms to arrive at a mutually agreeable relationship.
- 11.2 The City shall be the sole judge as to merits of the proposal, and the City's decision will be final.
- 11.3 A committee will be assigned by the Mayor with the task of reviewing the proposals received.
 - 11.3.1 The committee may request documentation from Proposer(s) of any information provided in their proposal response, or require the proposer to clarify or expand qualification statements.
 - 11.3.2 A short list of firms from proposals submitted may be selected for a presentation to the committee and ranked by committee members.
- 11.4 Final approval to enter into contract negotiations with the top ranked firm will be by the Mayor of the City of Lincoln.
- 11.5 The City shall not be liable for any expense incurred in connection with preparation of a response to this RFP.
- 11.6 The contract document shall incorporate by reference all requirements, terms and conditions of the solicitation, proposal received and all negotiated details.